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EXAMINER

BOUTAH, ALINA A

ART UNIT

PAPER NUMBER

2143

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/631,203 | Applicant(s) BERNET ET AL. | |
| | Examiner ALINA N. BOUTAH | Art Unit 2143 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/5/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This action is in response to Applicant's amendment filed January 30, 2008. Claims 1-51 are pending in the present application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 40-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are directed to computer-readable medium having data structure. Data structure is non-functional description material. See MPEP 2106.01 which states "When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. "

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2143

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-7, 11, 12, 14, 15, 19, 23-26, 28, 30, 41-48, 50 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,466,984 issued to Naveh et al.

Regarding claim 1, Naveh teaches a method of managing network traffic, comprising, receiving a request for network resources via a signaling protocol (col. 4, lines 37-44 - using RSVP to request a QoS),

the request including information identifying an application (col. 4, lines 37-44 – RSVP includes additional information to help a network device decide how to apply QoS);

evaluating the information identifying the application against policy information (abstract – the policy is enforced at the network device in response to receiving traffic from the application program that matches the traffic flow type.”); and

determining access to network resources based on a result of the evaluation (col. 9, lines 4-17 – repository stores policies that are associated with applications... only authorized applications may access the repository; col. 9, lines 42-55 – each network service defines how an application should access the policy server. For example, access may comprise setting a DiffServ Code Point in packets...”).

Regarding claim 2, Naveh teaches the method of claim 1 wherein the information identifying the application includes an application identifier (col. 5, lines 35-49).

Regarding claim 3, Naveh teaches the method of claim 1 wherein the signaling protocol comprises RSVP (col. 4, lines 37-44).

Regarding claim 5, Naveh teaches the method of claim 1 wherein determining access to network resources based on a result of the evaluation includes returning marking information in response to the request (abstract).

Regarding claim 6, Naveh teaches the method of claim 5 wherein the marking information represents a relative priority level (figure 1A: 108).

Regarding claim 7, Naveh teaches the method of claim 5 wherein the marking information includes a differentiated services codepoint (abstract).

Regarding claim 11, this is a computer-readable medium having computer-executable instructions for performing the method of claim 1, therefore is rejected under the same recited area as claim 1.

Regarding claim 12, Naveh teaches a method of requesting network resources, comprising:

constructing a request message in accordance with a signaling protocol, the request message including information identifying a type thereof as qualitative, and further including qualitative information (col. 4, lines 37-44 – using RSVP to request a QoS); and

sending the request message to request network resources, the request message passing through at least one network device that evaluates the qualitative information in the request message to determine access to network resources (abstract – the policy is enforced at the network device in response to receiving traffic from the application program that matches the traffic flow type;” col. 9, lines 4-17 – repository stores policies that are associated with applications... only authorized applications may access the repository; col. 9, lines 42-55 – each network service defines how an application should access the policy server. For example, access may comprise setting a DiffServ Code Point in packets...”).

Regarding claim 14, Naveh teaches the method of claim 12 wherein the signaling protocol comprises RSVP (col. 4, lines 37-44).

Regarding claim 15, the Naveh teaches the method of claim 12 wherein the qualitative information has an associated hierarchy (figure 5).

Regarding claim 19, Naveh teaches the method of claim 18 wherein the marking information represents a relative priority level (figure 1A - 108).

Regarding claim 20, Naveh teaches the method of claim 18 wherein the marking information includes a differentiated services codepoint (abstract).

Regarding claim 23, Naveh teaches the method of claim 18 further comprising, attaching the marking information to subsequent flow (abstract).

Regarding claim 24, Naveh teaches the method of claim 12 wherein the request message is sent towards a receiver (figure 2).

Regarding claim 25, this is a computer-readable medium having computer-executable instructions for performing the method of claim 12, therefore, is rejected under the same cited area as stated in claim 12.

Regarding claim 26, Naveh teaches a method of managing network traffic, comprising: receiving a request for network resources via a signaling protocol, the request including qualitative information (col. 4, lines 37-44 – using RSVP to request a QoS);

evaluating the qualitative information in the request against policy information (abstract – the policy is enforced at the network device in response to receiving traffic from the application program that matches the traffic flow type.”); and

returning information based on a result of the evaluation including information that specifies to an upstream sender how to mark packets for classification thereof (col. 10, line 66 to col. 11, line 2).

Regarding claim 28, Naveh teaches the method of claim 26 wherein the information identifying the application includes an application identifier (col. 5, lines 35-49).

Regarding claim 30, this is a computer-readable medium having computer-executable instructions for performing the method of claim 26, therefore, it rejected under the same cited area as stated in claim 26.

Regarding claim 41, Naveh teaches a computer-readable medium having a data structure for communicating network quality of service information on a network, comprising, a first field including a message header identifying a message in a signaling protocol (figure 1B – 130), a second field identifying the message as having qualitative information associated therewith (figure 1B: 1220, and a third field including at least one set of qualitative parameters (figure 1B - 132).

Regarding claim 42, Naveh teaches the computer-readable medium of claim 41 wherein the data structure is provided in an RSVP message from a sender (col. 4, lines 36-44).

Regarding claim 43, Naveh teaches the computer-readable medium of claim 41 wherein the computer-readable medium comprises a data transmission medium (figure 3).

Regarding claim 44, Naveh teaches the computer-readable medium of claim 41 wherein one of the parameters in the third field corresponds to information identifying an application (abstract).

Regarding claim 45, Naveh teaches a computer-readable medium having a data structure for communicating network quality of service information on a network, comprising, a first field identifying the message as having qualitative information associated therewith, and a second field including marking information corresponding to the qualitative information (figure 1B).

Regarding claim 46, Naveh teaches the computer-readable medium of claim 45 wherein the data structure is provided in an RSVP reservation message (col. 4, lines 36-44).

Regarding claim 47, Naveh teaches the computer-readable medium of claim 45 wherein the marking information represents a relative priority level (figure 1A - 108).

Regarding claim 48, Naveh teaches the computer-readable medium of claim 47 wherein the marking information includes a differentiated services codepoint (abstract).

Regarding claim 50, Naveh teaches the computer-readable medium of claim 49 wherein the DCLASS object includes a differentiated services codepoint (abstract).

Regarding claim 51, Naveh teaches the computer-readable medium of claim 44 wherein the computer-readable medium comprises a data transmission medium (figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-10, 21, 22, 27, 29, 39, 40 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,466,984 issued to Naveh et al.

Regarding claims 8, 21, 39 and 49, although Naveh does not explicitly teaches wherein returning marking information includes providing a DCLASS object, he teaches DSCP within RSVP messages (abstract). It is known in the art that DCLASS object is used to represent DSCP. One of ordinary skill in the art would have been motivated to employ DCLASS objects in order to identify whether or not to admit the request.

Regarding claims 9, 22 and 40, Naveh teaches wherein the DCLASS object includes a differentiated services codepoint (abstract).

Regarding claim 10 and 27, although Naveh does not explicitly teaches wherein the request further includes quantitative information, it is known in the art that this information is typical in standard RSVP messages. At the time the invention was made, one of ordinary skill in the art would have been motivated to include quantitative information in order to quantify traffic, thus allowing the system to determine the traffic pattern.

Claims 4, 13, 16-18, 29 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,466,984 issued to Naveh et al. in view of USPN 7,106,756 issued to Donovan et al.

Regarding claims 4, 16 and 17, Naveh fails to explicitly teach wherein determining access to network resources based on a result of the evaluation includes admitting or denying the request. In an analogous art, Donovan teaches determining access to network resources based on a result of the evaluation includes admitting or denying the request (col. 2, lines 39-44). At the time the invention was made, one of ordinary skill in the art would have been motivated to admit or deny the request in order to prevent unauthorized users to access the network resource.

Regarding claim 29, Naveh does not explicitly teach wherein the request comprises an RSVP PATH message. In an analogous art, Donovan teaches the request comprising an RSVP PATH message (col. 10, lines 11-37). At the time the invention was made, one of ordinary skill in the art would have been motivated to employ RSVP PATH message in order initiate data flow (col. 10, lines 11-37).

Regarding claims 12 and 31, Naveh teaches in a computer network, a system for providing quality of service via a signaling protocol, comprising:

a sender (host), the sender providing a message comprising qualitative information identifying an application (col. 4, lines 37-44 – using RSVP to request a QoS); and

a policy enforcement device, the policy enforcement device evaluating at least one of the messages communicated between the sender and the receiver, and determining access to resources based on the qualitative information (abstract – the policy is enforced at the network device in response to receiving traffic from the application program that matches the traffic flow type;” col. 9, lines 4-17 – repository stores policies that are associated with applications... only authorized applications may access the repository; col. 9, lines 42-55 – each network service defines how an application should access the policy server. For example, access may comprise setting a DiffServ Code Point in packets...”).

However, Naveh fails to explicitly teach a receiver, the receiver receiving the message from the sender and providing a return message in response thereto. In an analogous art, Donovan teaches receiving the message from the sender and providing a return message in response thereto (col. 10, lines 38-43). At the time the invention was made, one of ordinary skill in the art would have been motivated to provide a return message in order for a flow to be initiated.

Regarding claim 32, Naveh teaches the system of claim 31 wherein the information identifying the application includes an application identifier (col. 5, lines 35-49).

Regarding claim 33, Naveh teaches the system of claim 31 wherein the policy enforcement device includes a router (col. 2, line 16).

Regarding claim 34, Naveh teaches the system of claim 31 wherein the policy enforcement device includes a switch (col. 8, line 54).

Regarding claim 35, Naveh teaches the system of claim 31 wherein the signaling protocol comprises RSVP (col. 4, lines 36-44).

Regarding claims 18 and 36, Naveh does not explicitly teach wherein the policy enforcement device determines access to resources by adding marking information to the return message. In analogous art, Donovan teaches adding marking information to the return message (col. 2, lines 7-14). At the time the invention was made, one of ordinary skill in the art would have been motivated to add marking information to the return message in order to classify the message, thus providing quality of service.

Regarding claim 37, Naveh teaches the system of claim 36 wherein the marking information represents a relative priority level (figure 1A: 108).

Regarding claim 38, Naveh teaches the system of claim 36 wherein the marking information includes a differentiated services codepoint (abstract).

Conclusion

It is noted that the column, line, and/or page number citations used in the prior art references as applied by the Examiner to the claimed invention are for the convenience of the Applicant to represent the relevant teachings of the prior art. The prior art references may contain further teachings and/or suggestions that may further distinguish the citations applied to the claims, therefore, the Applicant should consider the entirety of these prior art references during

the process of responding to this Office Action. It is further noted that any alternative and non-preferred embodiments as taught and/or suggested within the prior art references also constitute prior art and the prior art references may be relied upon for all the teachings would have reasonably suggested to one of ordinary skill in the art. See MPEP 2123.

The prior art listed in the PT0-892 form included with this Office Action disclose methods, systems, and apparatus similar to those claimed and recited in the specification. The Examiner has cited these references to evidence the level and/or knowledge of one of ordinary skill in the art at the time the invention was made, to provide support for universal facts and the technical reasoning for the rejections made in this Office Action including the Examiner's broadest reasonable interpretation of the claims as required by MPEP 2111 and to evidence the plain meaning of any terms not defined in the specification that are interpreted by the Examiner in accordance with MPEP 2111.01. The Applicant should consider these cited references when preparing a response to this Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALINA N. BOUTAH whose telephone number is (571)272-3908. The examiner can normally be reached on Monday-Friday (9:00 am - 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alina N Boutah/

Examiner, Art Unit 2143